TEACHERS' RETIREMENT BOARD

INVESTMENT COMMITTEE

SUBJECT: Business Plans for 2000/01 | ITEM NUMBER: 4

ATTACHMENT(S): 1

ACTION: X | DATE OF MEETING: July 12, 2000

INFORMATION: _____ | PRESENTER(S): Patrick Mitchell

EXECUTIVE SUMMARY

One of the objectives contained in the CalSTRS Investment Management Plan is to conduct an annual planning session. The proposed business plans for the Investment Branch have been included as Attachment 1. The proposed objectives (contained in agenda item 5) emanate from the business plans provided.

The first segment of Attachment 1 provides a brief historical perspective for CalSTRS' investments from the beginning days to the year 2000. It is designed to provide background for existing and prospective Board members.

The business plans are provided for the major investment related categories. The business plan format has been provided in the following structure:

1. Role or purpose of the activity
2. Portfolio characteristics (for specialized categories descriptions and definitions were added for clarification purposes)
3. Performance measurement
4. Key issues

At the July 12, 2000 meeting, presentation will be completed by the individuals involved in the respective business activities. Clarification will be added and questions will be encouraged.

THE HISTORY OF CalSTRS INVESTMENTS

A NEW CENTURY BEGINS

At the turn of the twentieth century, a wave of progressive reform swiftly crosses the American political scene. Known as the "Progressive Era", few states are left untouched by the force of this movement. In California, the Progressive movement sweeps the election of 1910. Mandate in hand the governor, Hiram Johnson, contacts the foremost progressives of the period. Advisors like Theodore Roosevelt, Robert LaFollete and Woodrow Wilson school the newly elected official who in turn develops a program of legislation never before seen in the state. Business, labor, agriculture all are affected. The changes in Education reverberate to this day. Students receive free textbooks and effective July 1, 1913, (Statutes of 1913 -AB1263,) the legislature establishes the Public School Teachers' Retirement Salary Fund as a function of the State Board of Education. The Fund or California State Teachers' Retirement System, (CalSTRS) is created to provide teachers with a secure financial future during their retirement years and as an incentive to retain a professional career staff in the field of education.

1913 CalSTRS created

1917 World War I

1929 Stock Market crash

1941 Pearl Harbor

1951 Korean War

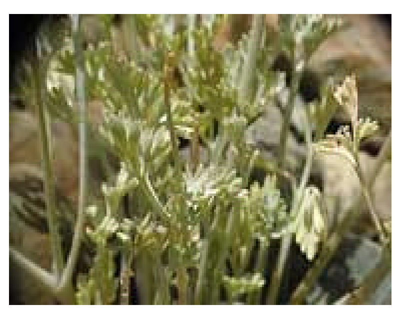
1970 Man lands on the moon

1972 Arab Oil Embargo

1973 Vietnam ends

Funding comes from a provision directing 5% of Inheritance Tax revenues toward the newly created CalSTRS. Teachers are granted retirement credit for services provided prior to 1913. CalSTRS opens for business in debt for the future benefits related to this service. In 1919 the CalSTRS shows a deficit of $26 million dollars. While all teacher/members are to contribute twelve dollars per year, no employer contributions are required. CalSTRS is operated on a pay-as-you-go mode from 1913 till July 1, 1972.

Over the decades, adjustments are made to the contribution schedule among the teachers, employers and the state. Inadequate funding remains the most significant issue facing CalSTRS. The inadequacy of these formulas is forcefully brought to the attention of the legislature in 1964 when the actuarial forecast reports a deficit of $2.1 billion. By 1975, the total net obligation is $7.8 billion and growing. Legislative solutions are proposed and enacted but fail to end the deficit.



While the legislature struggles with the issue, eyes turn to other areas of support for the Fund. The investment portfolio provides a major revenue source. Without question the most closely watched portion of the CalSTRS operation is the Investment Branch

1975 Nixon resigns

1976 Carter elected

Unemployment 10% Prime rate 21%

$7 billion CalSTRS Portfolio

Oil price triple

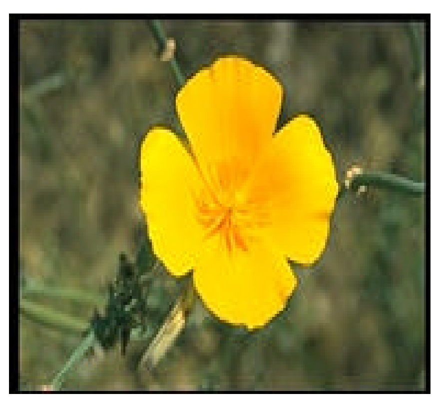
1986 Portfolio 17 86 billion

POLITICAL RESTRICTIONS

Until 1966, CalSTRS is statutorily prohibited from purchasing any asset other than fixed income securities. Proposition 6, an amendment to the California constitution, is passed in the 1970 General Election. It permits the System to invest in real estate and equities but limits the percentage of exposure. For six years, CalSTRS' equity exposure remains relatively constant between 3%-5% of the total investment portfolio. Thereafter, equity exposure grows and fixed income investments retreat until at the end of 1980 the portfolio contains $1.5 billion in equities and $5 billion in fixed income.

SEPARATION

Chapter 1433, Statutes of 1982, requires CalSTRS to terminate its interagency agreement with the California Public Employees Retirement System (CalPERS) for use of the services of their investment staff to manage the CalSTRS investment portfolio and in its place to create an independent investment management program. The Teachers' Retirement Board (Board) contracts with an interim Chief Investment Officer (CIO) and three investment firms to serve as portfolio managers, with cash in the custody of the State Treasurer's Pooled Money Investment Fund. The Board also contracts with a general investment consultant to identify the long-range objectives for CalSTRS and to develop an investment management plan commencing 1984. Further, the contract calls for recommendations for an organizational and staffing plan to implement the investment structure and for appropriate monitoring. When CalSTRS assumes investment management in 1983, the investment portfolio assets are valued at $10.9 billion.



Reagan Elected

Oil prices collapse

$17 billion
CalSTRS Portfolio

The passage of Proposition 21 in 1984 gives authorization to CalSTRS to manage the investment portfolio with the flexibility needed for today's changing financial and economic climate. This proposition removes specific investment restrictions and replaces them with the "prudent expert rule". Placing the entire portfolio with outside management, the System develops a long-range plan for the establishment of a permanent internal Investment Branch.

ASSET ALLOCATION AND MODERN PORTFOLIO THEORY

In 1985, the Board adopts an Asset Allocation Plan (Plan). The Plan implements a shift to equities making domestic equities the largest asset category in the portfolio. This strategic move pays off handsomely during a period of time in which stocks have one of the highest real rates of return in market history. Advancement to diversification targets is a major operational feature of the Plan.

THE MATRIX

In 1986, the cornerstone of the new Investment Branch is laid with the appointment of the first permanent CIO, coupled with the adoption of a three-year Investment Management Plan (IMP). The purpose of the plan is to achieve the highest real rate of return commensurate with prudent investment practices in the most cost efficient manner. The planning strategy includes external management with internal monitoring and preparation for eventual in-house portfolio management. CalSTRS expands its internal investment staff to eight professionals and seven support personnel.

ADVANCEMENT IN THE 80's

Paul Volker at the FED

1987 Alan Greenspan at the FED
Oct Stock Market crash

1987 Berlin Wall falls.

$32 billion Calstrs Portfolio

- CalSTRS purchases its first real estate property located in Sacramento at 7667 Folsom Blvd, which now serves as its main office.

- The Investment Branch creates four primary units: Equities, Fixed Income, Real Estate and Investment Operations.

- The Investment Branch opens the California Mortgage Conduit Program and the Member Home Loan Program. These programs will impact the State's economic environment while attaining a competitive market rate of return.

- CalSTRS hires State Street Bank & Trust Company of Boston as its Master Custodian.

- The Fixed Income unit institutes a program to have the bond portfolio managed using the Salomon Brothers Large Pension Fund Index, as its benchmark.

- The Investment Branch implements a Securities Lending Program through the Custodian.

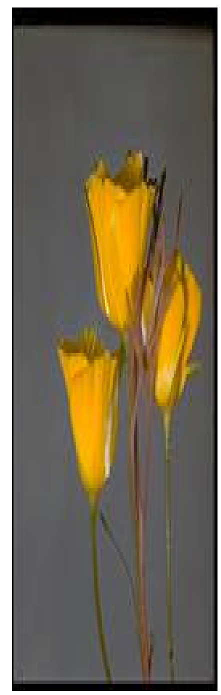
- The internal staff begins management of the short-term portfolio, which includes the organization of the cash managment/forcasting function and internal trading.

- A consultant is hired to monitor, analyze, and review alternative investment opportunities.

- A diversification target is hit by the funding of the first Alternative Investment.

- The Chief Investment Officer reports to the Board that the portfolio has grown to $29 billion.

- The investment staff continues to seek investment opportunities that allow for long term real rates of return to guarantee the financial integrity of CalSTRS.



END OF THE CENTURY

By 1990, CalSTRS has been in business 77 years, the Investment Branch 7 years. The Branch enters the decade determined to utilize every resource available in the quest for increased investment opportunity, diversification, benefits and potential for higher returns. The asset allocation policy considers which asset classes to utilize and in what proportion. The investment universe has developed a truly global perspective. CalSTRS is not to be left behind in that growing economy.

ADVANCEMENT IN THE 90's

- The Securities Lending Program is open to multiple lenders providing competition for the first time.

- Fulfilling another Plan diversification target the Board introduces an International Equity program. This global diversification policy provides more stability to the quarterly returns.

- The Board completes an exhaustive review of the Investment Management Plan. By managing the asset allocation, the System minimizes the risk of the principal loss while producing the highest expected return

- A Global Asset Allocation Program is established with the fundamental support being four external investment managers specializing in global asset allocation. Worldwide and geopolitical information will be utilized in the tactical allocation of different asset classes.

- This year, 1994, the market takes a downward spiral. The Investment Branch continues its pattern of diversification that allows it to show a positive return while many other pension funds lose principal value. The Investment Branch introduces a Credit Enhancement Program designed to provide liquidity and credit enhancement to municipal and public service securities. This program helps to reduce cost and increase marketability of these securities.

1991 Gulf War

1992 Clinton elected

1993 NAFTA passed

$88 billion CalSTRS Portfolio

1997Asian Crisis

1998 Portfolio 88.3 billion

Euro introduced

$100 billion
CalSTRS Portfolio

- The CalSTRS investment pool remains one of the largest pools of assets in the USA reaching $63.5 billion. The adoption of a Currency Hedging Program helps protect the investment portfolio if the US dollar strengthens. Pension Consulting Alliance (PCA), an independent consultant, is added as a complement to investment staff regarding portfolio structure and investment strategy. They are the Board's general consultant.

- A Cash Balance Plan is introduced.

- The Investment Management Plan is refined to focus on a more active approach. Emphasis is directed to the equity segment, both domestic and international, and a reduction in the fixed-income sector.

$100 BILLION AND INTO THE NEW MILLENNIUM

The asset allocation mix on June 30 included 45.9 % domestic equity, 24.9% domestic fixed income-23.7% international equity, 2.6% Alternative Investments 0.7% liquidity and 2.2% real estate. This year the portfolio gained $11.6 billion reaching a market level of almost $100 billion by June 30, 1999. Strong results in each asset class allowed CalSTRS portfolio to out perform 79% of its peers.

California State Teachers' Retirement System
Alternative Investments

Business Plan 2000/01

Portfolio Role and Purpose

The primary objective of the Alternative Investment portfolio is to provide enhanced returns over those of the public market. The strategy is to invest in limited partnerships including venture capital, leveraged buy-outs, and special situations, and to purchase secondary interests and co-investments.

Portfolio Characteristics

As of March 31, 2000, CalSTRS has committed approximately $6.6 billion to 94 partnerships and 5 co-investments. The portfolio has an estimated market value of approximately $4.5 billion, and approximately 60% of commitments have been funded.

The portfolio is diversified in accordance with strategic targets and ranges that were approved at the April 6, 1999 Investment Committee Meeting. As shown in the following table, as of March 31, 2000, the portfolio continues to be slightly under-weighted in both the venture capital and international sectors; however, both are within the proposed ranges. Definitions of market segments are provided in Appendix 1.

Alternative Investments Sub-Category	Proposed Ranges	Proposed Targets	Actual*
Buy-Out	50-70%	60%	65.1%
Venture Capital	10-20%	16%	12.3%
Debt Related	0-10%	2%	3.9%
Equity Expansion	5-15%	7%	9.7%
International Buy-Out (Canada, UK, Continental Europe)	10-20%	15%	9.0%
Total		100%	100%

*Calculated based on market value of actual partnership strategies plus unfunded commitments.

Pathway Capital Management has prepared an analysis of the trends in the funding of alternative investments. Pathway's analysis is presented in Appendix 2.

Performance Measurement

The CalSTRS' customized benchmark is a blended, dollar-weighted[1] benchmark comprised of 1) the tobacco-free Russell 3000® Index ("Russell 3000") and; 2) a Treasury bill return for capital contributions less than three years old. A 500 basis point premium is added to this blended benchmark to account for the additional illiquidity and risk involved with private equity. CalSTRS will continue to utilize the *Venture Economics' Vintage Year Comparison* by generation, such as the median IRRs and/or upper quartile IRRs to measure the performance of each of the individual partnerships in the portfolio.

The following table provides a summary of the results of the benchmark compared against the net IRR of the CalSTRS' alternative investment portfolio over the same time periods. The CalSTRS alternative investment portfolio has consistently outperformed the benchmark in each of the respective time periods.

Dollar-Weighted Russell 3000 Benchmark Comparison
To the CalSTRS Alternative Investment Portfolio as of 12/31/99

	3 Year	5 Year	10 Year	Inception
CalSTRS Net IRR	42.32%	37.93%	28.36%	27.95%
$-Wghtd. R-3000+500bpt.[2]	21.27%	26.42%	22.47%	22.69%

Key Issues

New and Next Generation Manager Opportunities - CalSTRS has proven that it can access the universe of top tier traditional managers. CalSTRS has garnered the reputation as a premier investor in larger established general partnerships by using a pro-active approach in implementing CalSTRS' strategy to be more important to upper quartile managers, coupled with a comprehensive due diligence process.

As a result of the strategy followed over the past 24 months, the diversification of the alternative investment portfolio has been tilted towards larger buyout strategies. The levels of venture capital and equity expansion, the highest performing asset categories over the past 10 years, have decreased on a relative basis. One method of achieving a higher percentage to venture capital and equity expansion would be to consider a broader range of opportunities. As a result, CalSTRS requested that Pathway Capital Management conduct a study to determine the feasibility of

[1] Because a time-weighted rate of return ("TWRR") and a dollar-weighted rate of return are not directly comparable, the customized benchmark incorporates a dollar-weighting adjustment in its calculation. In other words, the customized benchmark assumes CalSTRS would have invested the same amount of capital into the Russell 3000 as it actually did into alternative investments over the same time period.

[2] With adjustment for Treasury bill return for cash flows less than three years old.

including an allocation to first time funds. Staff has concluded from this report that investments in first-time general partner teams are riskier than investing in experienced follow-on teams. Further, the historical returns generated by follow-on teams have outperformed first-time teams in most cases.

Nevertheless, staff has further concluded that Pathway's report also showed that new investment teams have generated upper quartile returns as well. Staff believes that the careful selection and addition of new-manager teams to its alternative investment portfolio would enhance the overall diversification with nominal added risk. New-manager teams could provide an added dimension of deal flow not seen nor provided by CalSTRS' larger, more experienced groups.

CalSTRS will endeavor to add first-time general partner teams to the portfolio during the foreseeable future, without lowering its qualitative and quantitative investment standards. To accomplish this goal, each new management team's performance record will be considered in a manner unique to its composition. Instead of analyzing traditional track records with demonstrated realized performance resulting from a proven investment strategy, more time and resources will be used in determining how historical investment experience of the first-time fund relates to the proposed investment strategy of its newly formed fund. Additional time and resources may be allocated to conduct due diligence and reference checks in an effort to evaluate the new management teams' abilities.

Due Diligence - The cornerstone of the CalSTRS Alternative Investment program has been adherence to policies and procedures that contain and control the types and amounts of risk included in the portfolio. Every partnership must withstand rigorous due diligence performed by the alternative investment consultant and/or an independent fiduciary plus internal staff. Due diligence concentrates primarily on five aspects: (1) management team, (2) investment strategy, (3) deal flow, (4) performance, and (5) risk concentrations.

Due diligence by staff begins with an exhaustive questionnaire followed by a combination of qualitative and quantitative evaluations. The output is designed to construct a portfolio of investments that yield upper-quartile returns as identified by Venture Economics.

Venture Capital Funds - Limited partnerships utilizing a venture capital strategy have outperformed the other types of partnership investment strategies over the past 10 years. As a result, the venture capital funds are often over-subscribed which has led the general partners to negotiate partnership terms that are less favorable to limited partners. Market terms for venture capital funds are moving toward a 25% carried interest to the general partners, and in some instances, a 30% carried interest. In addition, more venture capital funds are declining to return management fees and expenses paid by the limited partners prior to sharing in profits; however, profits and losses continue to be aggregated on a total fund basis. The changing economics of the venture capital partnerships may erode the superior gains to the limited partners compared to other investment strategies.

Concentration by Vintage Year - Should there be an arbitrary limit placed on the commitments to U.S. and non-U.S. buyouts in a calendar year? As of 03/31/00 the U.S. buyout portion of the Alternative Investment program had total commitments of $3.9 billion, cumulative contributions of $2.1 billion, and market value of $2.3 billion. The non-U.S. buyout portion had respective numbers of $0.7 billion, $0.4 billion, and $0.4 billion.

Since July 1997, a concentrated effort has been made to implement the Investment Committee's strategic asset allocation of 5% to Alternative Investments. Tremendous strides have been made to achieve the asset allocation targets with an emphasis on achieving the highest returns (upper-quartile). Out of the $4.6 billion of commitments made to U.S. and non-U.S. buyout funds since the inception of the program, $3.4 billion has been made in the past thirty-three months.

Considering the existing pipeline and the increasing size of the prospective partnerships, it is possible that between 12/31/99 and 12/31/00 over $4.0 billion of commitments to U.S. and non-U.S. buyouts could be made by CalSTRS. Although each commitment must stand on its own merits, the sheer size of the increase is a key issue to be considered.

Appendix 1

Definitions of Market Segments

Staff and Pathway developed allocation targets for the major market segments of the CalSTRS alternative investment portfolio. These targets were developed with the understanding that the alternative investment strategy would remain flexible to allow for adjustments based on external factors, such as the availability of quality investment opportunities, the flow of capital into the private equity asset class, and the status of the economic and business environments.

The five market segments identified in the 1998 Investment Plan included buyouts, venture capital, debt-related, equity expansion, and international investments. Although the entire alternative investment market was narrowed down to these five categories, it is important to note that many investment strategies exist within each of the segments as well. These investment segments are described below.

Buyouts/Acquisitions

Leveraged Buyout ("LBO")	The LBO is used to purchase a company, subdivision, or subsidiary of a company that is currently undervalued or under-performing with the use of leverage. Companies typically sell low or non-technology products in industries not subject to wide profitability swings.
Growth Buyout ("GBO")	The focus of GBOs is typically on building a small company into a much larger, rapidly growing company. Attractive candidates for GBOs must be able to capitalize on key competitive advantages they may have to increase revenues and cash flow through market share gains, rapid market growth, distribution or product line expansion, and/or market consolidation.
Platforms/Add-ons	Platform investing is a growth strategy which involves the acquisition of a company that will be the base (or platform) from which future acquisitions will be made. The platform is similar to the GBO in that both are considered high-growth investment strategies. However, platforms rely on growth through industry consolidation or acquisitions.
Recovery/Turnarounds	The focus of a turnaround situation is when there is an acquisition of equity and/or equity related securities in a financially distressed company in conjunction with the restructuring or recapitalization of a company.

Venture Capital

Venture Capital – Seed	The first outside investment in a company when a small amount of capital is provided to an inventor or entrepreneur to prove a concept.
Venture Capital – Early	Includes startups (financing for use in product development and initial marketing) as well as "Other Early Stages" (companies receiving venture capital for the first time that have already developed a product).
Venture Capital – Middle	Working capital for the initial expansion of a company that is producing and shipping. The company probably has growing accounts receivable and inventories, but still may not be showing a profit.
Venture Capital – Late	Major expansion of a company whose sales volume is increasing, and that is breaking even or is profitable. Funds are utilized for further plant expansion, marketing, working capital or an improved product. Also includes bridge financings for companies expecting to go public within one year.
Venture Leasing	The leasing of equipment to development stage and emerging businesses in exchange for above average lease yields and possibly equity participation.

Debt Related

Subordinated Debt Expansion Financings	Provides financing principally as growth capital for successful businesses.
Subordinated Debt For Acquisitions	Provides financing principally for acquisitions and recapitalizations.
Distressed Debt	Purchase of discounted debt of a distressed company prior to a restructuring.

Equity Expansion

Equity expansion investments are defined as investments involving the purchase of substantial, long-term minority equity positions in undervalued privately or publicly held companies. This strategy is similar in style to later stage venture capital investments, except that equity expansion investments are generally larger, and are typically less technology oriented, and are usually not made in a syndicate. These small and medium sized companies have grown from the start-up stage to profitability and are poised for continued rapid growth.

Performance is closely correlated to later stage venture capital funds that have a low exposure to technology investments. Although the number of funds that primarily target equity expansion are few, they are generally larger in size than venture capital partnerships.

International Investments

International investments can include any of the investment strategies mentioned above, but focus their activity outside of the United States.

California State Teachers' Retirement System
Credit Enhancement Program

Business Plan 2000/01

Portfolio Role and Purpose

The Credit Enhancement Program is an Off-Balance Sheet component of the CalSTRS investment portfolio, enabling CalSTRS to use its existing asset base and liquidity strength to generate fee income. The primary role of the Credit Enhancement Program is to provide fee income.

Description and Definition

Credit enhancement is the substitution of a highly rated financial institution's credit rating for that of a lower rated public or private entity. It is an agreement by a third party to pay the investor any scheduled interest and/or principal payments in the event the primary obligor does not pay. This substitution (for a fee) allows the public or private entity access to the capital markets and permits them to pay a lower interest rate to investors.

Credit enhancement transactions normally utilize financial instruments known as letters-of-credit (LOC). A LOC is an unconditional promise to make payments up to a stated amount for a specified period upon receipt of a proper notice. The commitment is irrevocable. The following are definitions of commonly used terms.

<u>Direct Pay Letter-of-Credit</u>

For this letter-of-credit, the investor (through the trustee) looks to the Direct Pay LOC Bank for all interest and principal payments to investors. The obligor (company or municipality seeking credit) then reimburses the Direct Pay Bank. If the obligor fails to reimburse CalSTRS for the LOC drawing, the bank taking a direct interest in the issuer's creditworthiness reimburses CalSTRS.

<u>Confirming Letter-of-Credit</u>

For this LOC, the investor (through the trustee) looks to the bank supporting the obligor to make the interest and principal payments to investors. If the bank fails to make these payments, the trustee calls upon CalSTRS to make the payment. CalSTRS would then turn around and demand reimbursement from the bank.

Liquidity Facility

This form of LOC is an availability to pay the purchase price upon a bondholder exercising a put option. The bonds or commercial paper that this facility supports may be remarketed on a daily, weekly, or monthly basis and need to have their marketability guaranteed. If there is a failed remarketing, CalSTRS may be required to "purchase" these bonds and receive an agreed upon rate of interest payments. In the case of commercial paper, this commitment may be revocable under certain circumstances.

Trustee

A financial institution with fiduciary responsibilities to bondholders (investors) to make principal and interest payments as well as administer all other aspects of the bond indenture.

Bond Indenture

An agreement between an issuer of bonds and the bondholder setting forth the terms of the bonds. The indenture also provides for the appointment of a trustee to act on behalf of bondholders.

Portfolio Characteristics

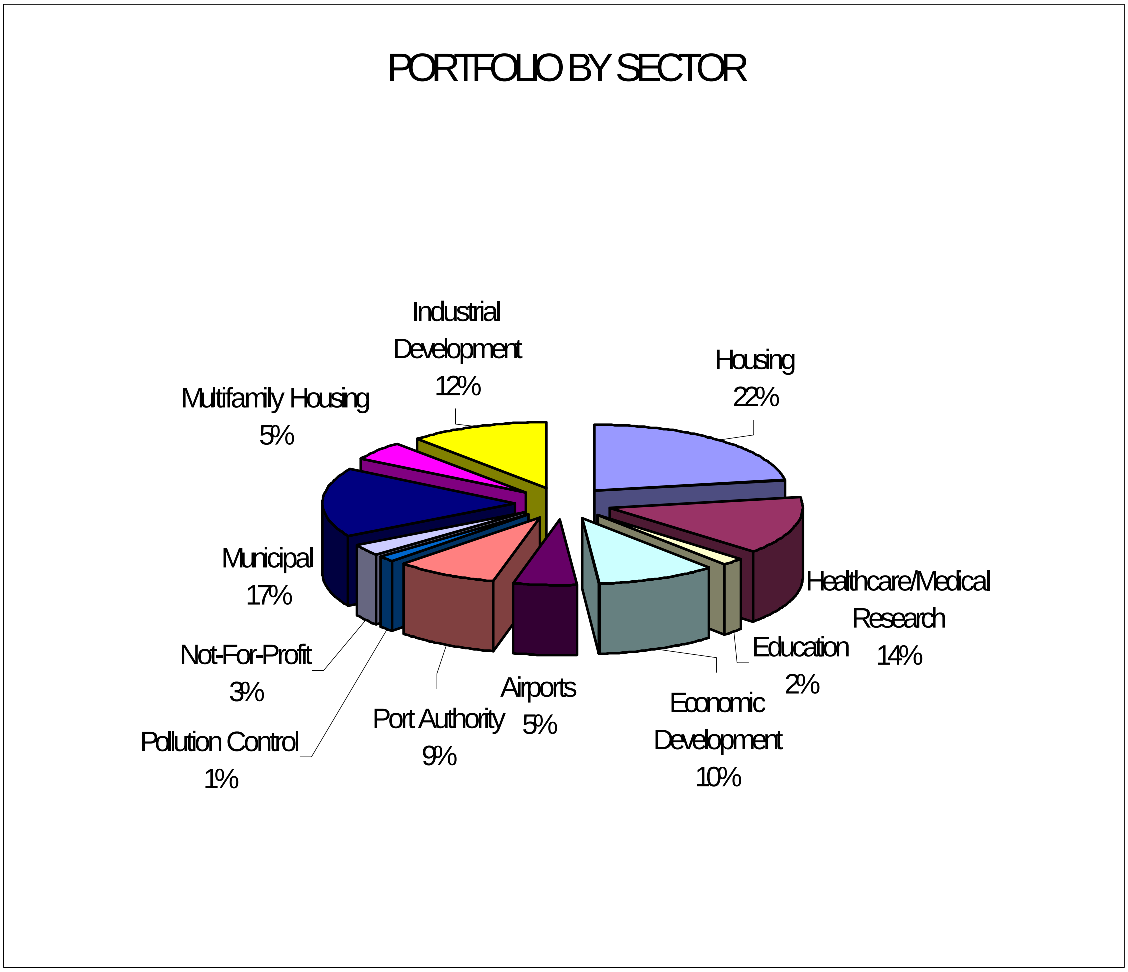
The Credit Enhancement Program has evolved over time by "word-of-mouth" without an active marketing effort. Disruptions in the capital markets, primarily the Asian emerging markets have created dislocations in financial institutions worldwide. Many investors in the markets are developing a preference for CalSTRS as a credit enhancer because it is perceived as being highly stable. CalSTRS has a good flow of transactions.

- As of June 2000, total commitments were approximately $1 billion and a projected annual income of approximately $2.4 million, or 24 basis points.

- Annual business expenses run at approximately $60,000 for rating agency fees. Approximately two people have been required to complete the due diligence and program administration over the past year. However, additional staffing will be required as the program continues to expand.

The Credit Enhancement Program portfolio currently stands at $1 billion. Enhancements are underwritten on an opportunistic basis with a zero loss underwriting standard. As a result, the diversification of the portfolio has evolved over time based on each incremental underwriting activity undertaken. The sector with the greatest exposure is housing at 22% of the portfolio. The housing activity primarily supports the California Housing Finance Authority, rated AA, where CalSTRS provides liquidity for variable rate bonds. The majority of these transactions are ultimately backed by AAA rated bond insurers. The second highest concentration is the municipal sector at 17% of the portfolio. The majority of these credits have a fronting financial institution taking a first loss position.

A number of program updates and enhancements have been made since the Credit Enhancement program's inception. The most recent presentation was April 1999.



Key Issues

Some business opportunities were lost over the past five years due to a lack of clear authority in the California Education Code which restricted CalSTRS from conducting business transactions which “inure to the benefit of a school district or other employing agency.” This limitation was altered in the fall of 1998 with the passage of SB 2126 which permits CalSTRS to provide credit enhancement to employing agencies, subject to meeting fiduciary standards, and operating under the safe harbor established under Section 503 of the Internal Revenue Code.

There are a variety of opportunities to pursue within the Credit Enhancement Program. We are limited only by the allocation of resources and credit underwriting standards. As stated previously all transactions are underwritten to a zero loss standard. The desire is for the Credit Enhancement Program to be selective in writing new business with a prudent accumulation of risk. The most promising areas are to expand the underwriting of credit enhancement transactions that support California K –12 Schools and California Community Colleges and support California multifamily housing projects.

California State Teachers' Retirement System
Currency Hedging Program

Business Plan 2000/01

Role and Purpose

CalSTRS has adopted a global investment strategy, which includes a 25% strategic allocation to non-dollar investments, fifty percent (50%) of which is targeted to be managed on a passive basis and fifty percent (50%) is targeted to be managed actively. Considering the commitment to non-dollar assets and the impact that currency fluctuations have on the total return of the EAFE markets, CalSTRS has recognized the need to implement strategies designed to address the management of currency risk through currency hedging.

Description and Definition

The decision by U.S. dollar-based investors to diversify into foreign assets is predicated upon the desire for improved risk-adjusted returns. The theory behind the foreign diversification argument is that, while domestic assets tend to move up and down together because they are similarly affected by domestic events, the various capital markets around the world often experience unrelated price movements. Investment performance in these markets may not be closely linked to the U.S. financial markets. Stated in another way, the performance of non-U.S. investments have a "low correlation" with the performance of domestic investments. The degree of independence of each market is directly linked to the independence of a nation's economy and government policies. Although there continues to be common factors, such as widespread recessions or booms, which affect asset prices globally, academicians and market practitioners argue that diversification between markets around the world results in reduced portfolio risk and improved risk-adjusted portfolio returns.

Currency hedging is an agreement between a financial institution and CalSTRS, designed to reduce the risk associated with holding non-dollar investments. The primary objectives in managing currency risk are to reduce the downside by hedging currency positions against potentially adverse exchange rate movements and to benefit from favorable exchange rate movements.

Program Characteristics

As of March 31, 2000, CalSTRS had approximately $30 billion allocated to non-dollar equities, with $15.3 billion under management with a passive EAFE Index mandate. The implementation of CalSTRS' Currency Hedging Program for the passive non-dollar equity portfolio is managed internally within the Fixed Income unit using currency forwards concentrating on creditworthy counterparties. A forward foreign exchange transaction is a contractual obligation that provides the buyer or seller of a currency with a firm exchange rate for the conversion of a designated amount of that currency on a specified date (the value date) in the future. Limited amounts of short currency positions are established in approved currencies when there is a high probability that the U.S. dollar may strengthen or when interest rate differentials are compelling.

The Currency Hedging Program for the non-dollar EAFE portfolios had the following hedging statistics as of March 31, 2000:

	Pacific Basin	European	Total
Active Managers	4.5%	0.0%	1.7%
Passive Manager	30.1%	0.0%	10.6%

The active portfolios had approximately $200 million of Japanese yen hedged back to U.S. dollars, while the passive portfolio had about $1.6 billion of Japanese yen hedged back to U.S. dollars. There were no hedges for the European region within either the active or passive portfolios. In total, approximately 6.8% of the entire non-dollar EAFE portfolios were hedged.

Performance Measurement

Currency risk can be managed by utilizing either a: 1) fully hedged, 2) unhedged or, 3) partially hedged performance benchmark/strategic currency exposure. A fully hedged approach reduces volatility by effectively eliminating the impact of foreign currencies in a non-dollar portfolio, but does so at a potentially significant financial cost. It also eliminates any opportunity to benefit from favorable currency movements. An unhedged approach to currency management involves minimal transaction costs but can result in an increase in the volatility of returns as a result of retaining the currency exposure. A partial hedge combines the benefits and costs of the fully hedged and unhedged approaches, and results in a reduction of both potential upside and downside movements. CalSTRS' Currency Hedging Program is measured against an unhedged performance benchmark. The monitoring program closely tracks the currency hedging gains and losses on a monthly basis that is subsequently reported to the Investment Committee in the Chief Investment Officer's report.

Since inception, the total realized gains for the Currency Hedging Program have amounted to $434 million, with the active portion contributing $74 million and the passive portion contributing $360 million.

Key Issues

The decision regarding how to handle the currency exposure associated with the non-dollar assets within the investment portfolio may have a significant impact on the total return. With a 25% strategic allocation to non-dollar investments, currency represents the third largest exposure in CalSTRS' investment portfolio. Therefore, the major issue for controlling the risk associated with CalSTRS' currency exposure is the ongoing development and implementation of a strategy designed to manage that exposure, along with the selection of an appropriate performance benchmark/strategic currency exposure.

In 1995, CalSTRS first adopted its Currency Hedging Program Policy dictating how the System shall manage its currency risk for the passive non-dollar equity portfolio, with reviews and revisions in both 1997 and 1999. Continuous monitoring of changes in the non-dollar equity portfolio and the marketplace are required in order to control risk. As a result, one of the 1999/00 objectives approved for the Investment Branch was to evaluate the Currency Hedging Program in terms of the original objectives presented to the Investment Committee in July 1995.

In May 2000, Callan Associates (Callan) conducted a comprehensive review of the currency markets including an in-depth discussion of currency management considerations when designing a currency strategy and selecting a performance benchmark. The presentation also included an evaluation of CalSTRS' internally managed Currency Hedging Program since its inception. As a result of their evaluation of the program, Callan concluded that the Hedging Program has achieved its overall objective of protecting the passively managed non-dollar equity portfolio against a rising dollar. However, Callan further concluded that the Hedging Program would benefit from further clarification of program objectives going forward.

California State Teachers' Retirement System
External Equities

Business Plan 2000/01

Role and Purpose

The primary function of the equity portfolio is to provide a high-expected rate of return, relative to other assets at a reasonable level of liquidity and to diversify the exposure into multiple markets. California State Teachers' Retirement System's (CalSTRS) strategy is to invest the domestic segment across the Russell 3000 Index of securities and across the Morgan Stanley Capital International (MSCI) All Country Ex-US (AC ex US) index for the international segment. In June 2000, the Investment Committee (IC) adopted a new benchmark that excluded tobacco sector stocks. This benchmark change was done in conjunction with the Benchmark Modification Policy adopted in May 2000.

The total public equity portfolio is invested with emphasis on both passive and active management. As of May 31, 2000, the market value of domestic equity was $46 billion. This amount represented 42.3% of the total investment portfolio. Passive portfolios represented 80%, while active portfolios accounted for 20% of the domestic equity segment, which meets the target approved by the Investment Committee. For the same period the market value of the international equity was $27 billion which represented 25.2% of the total investment portfolio. The passive management/active management split was 56% passive and 44% active. The target for the international portfolio is 50% passive and 50% active.

Portfolio Characteristics

The estimated market value of the domestic equity portfolios was $46 billion, which represented 42.3% of the total investment portfolio on May 31, 2000. CalSTRS has 18 externally managed and one internally managed domestic equity portfolio(s). Both the passive and active managers are listed along with the market value of the assets below:

NAME OF MANAGERS	***PORTFOLIO MARKET VALUE***
ENHANCED	
Barclays Global Investors	$ 723 million
DSI International Management	$ 804 million
Mellon Capital Management	$ 655 million
State Street Global Advisors	$ 794 million
LARGE CAP CORE	
Chicago Equity Partners	$ 505 million
First Quadrant	$ 484 million

LARGE CAP VALUE	
Brinson Partners	$ 522 million
Delaware Investment Advisors	$ 419 million
Sasco Capital Inc.	$ 592 million

LARGE CAP GROWTH	
Brown Capital Management	$ 464 million
NCM Capital Management	$ 698 million
Putnam Capital Management	$ 581 million

SMALL CAP VALUE	
Ariel Capital Management	$ 306 million
Delphi Management	$ 180 million

SMALL CAP GROWTH	
Denver Investment Advisors	$ 730 million
TCW Asset Management	$ 552 million
Total Active Management	**$ 9,009 million**

PASSIVE	
CalSTRS Internal S/P 500 Index	$14,686 million
External BGI S/P 500 Index	$15,962 million
External BGI Extended Mkt. Index	$ 6,177 million
Total Passive Management	**$36,825 million**

Transition Account	$ 96 million

TOTAL DOMESTIC EQUITY	**$45,930 MILLION**

The May 31, 2000 the market value of the international equity portfolios was approximately $27 billion, which represents 25% of the total investment portfolio. There are 18 international equity managers, with 16 active and two passive external managers. External investment managers perform all of the international equity investment management. The managers and portfolio values are listed below:

NAME OF MANAGER	*PORTFOLIO MARKET VALUE*
MSCI EAFE	
Bank of Ireland Asset Management	$ 1,054 million
Batterymarch Financial Mgmt., Inc.	$ 518 million
Brinson Partners, Inc.	$ 495 million
Capital Guardian Trust Company	$ 1,662 million
Delaware International Advisors, Ltd.	$ 318 million
Fiduciary Trust Asset Management	$ 816 million
Lazard Asset Management	$ 954 million
Marvin & Palmer Associates, Inc.	$ 579 million
Morgan Stanley Asset Management	$ 903 million
Nicholas-Applegate Capital Mgmt.	$ 625 million
Scudder Kemper Investments	$ 959 million
EUROPE	
Fidelity Management Trust Company	$ 483 million
Oechsle International	$ 1,267 million
PACIFIC BASIN	
BlackRock International, Ltd.	$ 292 million
Newport Pacific Management	$ 355 million
Schroder Capital Management Intl., Ltd.	$ 694 million
Total Active International	**$11,974 million**
PASSIVE	
BGI Europe	$ 9,388 million
BGI Pacific Basin	$ 4,263 million
State Street Global	$ 1,711 million
Total Passive International	**$15,362 million**
Currency Allocation (Hedged)	$ 44 million
TOTAL INTERNATIONAL EQUITY	**$27,380 MILLION**

Performance Measurement

The performance benchmark for the aggregate domestic equity portfolio is the Russell 3000 Index. However, each of the managers has an individualized performance benchmark. As identified earlier, the benchmark will be changed to the Russell 3000 less tobacco stocks. From 1986 to 1995, the performance benchmark for the domestic equity portfolio was the Wilshire 5000 Index. The following table compares the aggregate active and passive portfolios to the Russell 2500 Index, Russell 3000 and the Wilshire 5000 over the past one, three, five, and ten year periods, ending May 31, 2000:

Active and Passive – Domestic Equity For the periods ending May 31, 2000				
	1 Years	3 Years	5 Years	10 Years
Active	13.33	14.39	17.45	14.62
Passive	12.42	20.00	22.78	16.89
Russell 2500	16.82	12.87	16.65	14.84
Wilshire 5000	10.32	19.13	22.18	16.72
Russell 3000	11.83	19.70	22.76	17.12

The performance benchmark for the total international equity portfolio is the MSCI All Country ex US. The portfolio has two regional managers, one compared to the MSCI European Index and one compared to the MSCI Pacific Basin Index. The portfolio has one emerging market manager that is compared to a custom Emerging Market Index. All of the other managers are measured against the MSCI EAFE Index. These benchmarks will be changed to exclude tobacco securities. The following table compares the aggregate active and passive portfolios over the past one, three and five year periods.

Active and Passive – International Equity *(International Equity Inception Date is 6-1-93) For the periods ending May 31, 2000				
	1 Year	3 Years	5 Years	10 Years
Active	26.52	15.61	15.81	N/A*
Passive	16.38	7.89	8.01	N/A
MSCI EAFE	17.14	10.75	10.08	7.45
MSCI AC ex US	18.49	9.90	9.89	7.74

Key Issues

Active management – The appropriate split between active and passive management continues to be a source of debate in the investment and academic communities. In October of 1997 the CalSTRS Investment Committee approved a proposal to increase the percent of active management in both the domestic and international equity portfolios. The process took about two years to complete, however, the preliminary results indicate that top-down and bottom-up strategy used by CalSTRS has added significant value to the investment portfolio.

The domestic equity target of 80% passive and 20% active management should be reviewed. There has been considerable advancement in technology over the past three years to assist the Investment Committee in making the determination of the appropriate percent of passive management. There is no question that a large public pension plan should have a significant allocation to passive management. The question is what is that percentage? It is anticipated that the international equity target of 50% active and 50% passive will not be considered in this review.

Emerging market investments – The passively managed emerging market account has approximately $2.0 billion or 80% of the emerging market exposure. The actively managed non-U.S. equity managers are allowed to purchase emerging market equities holding $500 million or 20% of the emerging market securities. In March 1998 the Investment Committee approved a 50% active and 50% passive target. In November of 1999 the Investment Committee instructed staff to review the relative merits of active management of emerging market securities. One of the investment objectives is designed to review active management and report the finding to the Investment Committee.

California State Teachers' Retirement System
Internal Equity

Business Plan 2000/01

Portfolio Role and Purpose

The Investment Committee committed $1 billion to an internally managed S&P 500 Indexed portfolio in September 1997. The primary intent of this program was to execute an internally managed portfolio in a cost-effective manner producing investment performance that was competitive with CalSTRS' externally portfolio. In addition other ancillary benefits, such as streamlined management activities, confidentiality, etc., might accrue to the overall CalSTRS' investment program. Investment management of the internal portfolio began on April 1, 1998. Subsequently in May 1999, the Investment Committee approved increasing the size of the internal portfolio to 50% of the passive domestic equity portfolio.

The Investment Committee approved the concept of a cash equitization program for the domestic equity allocation in October 1998. The cash equtization program provides a mechanism that enables the domestic equity exposure to remain closer to the adopted strategic asset allocation target. The cash equitization program helps CalSTRS in maintaining market exposure and minimizing expected tracking error while significantly reducing the impact that rebalancing might have upon the collective decisions of the CalSTRS domestic equity managers' investment decisions. The program began operations on May 3, 1999.

Internal Equity staff provides technical support to other activities in the CalSTRS' investment portfolio. Specifically, staff provides venture capital stock distribution liquidation services. The objective of this service is to return cash of a value equal to or greater than the market value of the distributed stock at time of distribution. The objective is to seek liquidity, with the intent to minimize downside risk while considering upside potential.

Performance Measurement

S&P 500 Indexed Portfolio - The performance objective of the internal S&P 500 Indexed portfolio (Portfolio) is to closely track the return of the S&P 500 Index. Table 1 summarizes the results for the Portfolio, the benchmark S&P 500 Index, and the difference, called "tracking error." For the 12 month period ending April 30, 2000, the Portfolio returned 10.275% exceeding the benchmark index by 9 basis points. The returns for the Portfolio incorporate all transaction related expenses such as commissions and market impact cost.

California State Teachers' Retirement System
Home Loan Program

Business Plan 2000/01

Role and Purpose

The Home Loan Program (HLP) was originally created with a dual purpose of facilitating home ownership for California teachers while providing an investment opportunity for the CalSTRS investment portfolio. This program is not a member benefit and, therefore, engages in loan origination activity consistent with the financial integrity of the program and the sound investment of the retirement fund. The CalSTRS Long-Term Fixed Income Portfolio includes a thirty percent (30%) target weighting to mortgage-backed securities (MBS). As a result, the ability to generate these types of securities through the HLP as an alternative to buying them in the open market represents an attractive investment option that enhances the diversification of the Fixed Income Portfolio assets, and improves the risk/return profile of the MBS Portfolio. Furthermore, the management of the HLP fulfills Sections 22362 (a) of the Teachers' Retirement Law, which states that the Board shall give first priority to investing not less than 25 percent of all funds of the plan that become available in a fiscal year for new investments, in obligations secured by a lien on residential realty located in the State. Therefore, the loans generated by the HLP help CalSTRS meet the legislative mandate, as well.

In order to facilitate the development of the CalSTRS HLP, Correspondent Agreements with private lending institutions are established in order to originate and service the mortgage loans. As stipulated within these agreements, 15 and 30-year fixed interest rate conventional mortgage loans are made to qualified participants for the purchase or refinance of their one to four family, owner-occupied properties within the State of California. These mortgages are then available for inclusion in the MBS portfolio or can be sold, thereby providing cash flow for the funding of other investment opportunities.

Program Characteristics

Over the past thirteen years, CalSTRS' HLP has made over 21,000 mortgage loans to members, and funded approximately $2.5 billion in loans. Production for the current fiscal year will exceed $50 million.

Program enhancements were implemented concentrating on affordability issues including down payment assistance and "no points/no fees" loans. The number of correspondent lenders was increased from two to thirteen to make the program more accessible to potential borrowers throughout California. Two new programs have been developed which have been designed to address affordability, recruitment, and retention issues.

1. “No Points/No Fees” Loan Program – Quite often, the most difficult part of the home buying process is coming up with enough money for the downpayment and/or fees. In addition to the traditional 3-5% of the purchase price required as a downpayment, the borrower typically must pay an additional 2-3% of the purchase price of the home for closing costs. The CalSTRS “No Points/No Fees” Loan Program allows the borrower to “roll” the non-recurring portion of these closing costs into the loan amount making the out of pocket costs associated with the loan process more affordable.

2. CalSTRS/CaHLIF “Zero Down Preferred” Program – CalSTRS and CaHLIF, the insurance arm of the California Housing and Finance Agency (CHFA), have joined to offer a special mortgage program also designed to make purchasing a home more affordable for participants. This program combines a traditional 95% loan-to-value first mortgage with secondary financing provided by CalSTRS equal to 5% of the value of the home. The deferred (silent) second loan accrues interest on a simple basis for the first fifteen years, and on a compounded basis for the final fifteen years, at an amount not to exceed the interest rate on the first mortgage. The second loan must be paid off when the property is either refinanced or sold, and is 100% insured by CaHLIF.

Performance Measurement

Although there is no generally accepted performance measurement standard to judge the HLP, a process has been established in order to identify and monitor the financial contribution of the program. The following analysis identifies the program’s net contribution to operations, taking into account the cash flow, cost of funds, excess servicing, and any gains or losses taken from the portfolio as a result of the sale of securities.

The first table shows the financial contribution, using the Liquidity Portfolio yield as the cost of funds while, for comparison purposes, the second table shows the same data using the 5-year U.S. Treasury (UST) yield as the cost of funds.

Financial Report	**7/1/99 to 3/31/00**
Coupon Income	$11,329,636
Cost of Funds (Liquidity Yield)*	(8,607,227)
Net Interest Margin	$ 2,722,409
Excess Servicing Fee Income	$ 404,172
Recognized Gain/Loss	$ 0
Net Contribution to Operations	$ 3,126,581

*Reflects the Liquidity Portfolio yield as the cost of funds

Financial Report	**7/1/99 to 3/31/00**
Coupon Income	$11,329,636
Cost of Funds (5-year UST yield)*	(9,132,532)
Net Interest Margin	$ 2,197,104
Excess Servicing Fee Income	$ 404,172
Recognized Gain/Loss	$ 0
Net Contribution to Operations	$ 2,601,276

*Reflects the 5-year UST yield as the cost of funds

Key Issues

Affordability and Retention - The HLP has undergone some significant changes over the past two years. The number of Correspondent Lenders participating in the Program has grown from two to thirteen, with plans to evaluate and interview additional lenders. Two new programs have been developed to enhance the HLP by addressing affordability issues. Also, efforts have been made toward developing and implementing a marketing strategy for the HLP. This strategy includes articles in member newsletters/guides, as well as a website dedicated to information related to the HLP. In summary, the CalSTRS HLP seeks to add value for the CalSTRS membership in such a way that addresses affordability and retention issues, while maintaining the appropriate investment standard.

Exit Strategy - Given the progress made within the HLP, as the production levels increase, exit strategies are being developed which will involve loan securitization and sale. The CalSTRS HLP will be a self-funded, profitable mortgage loan program.

Table 1: S&P 500 Performance As of April 30, 2000

Period	Portfolio	Index	Tracking Error
Total Return			
1998, Apr-December	+12.892%	+12.975%	–0.084%
1999	+21.111%	+20.987%	+0.124%
2000 YTD	-3.011%	-3.009%	-0.002%
Annualized Return			
1 Year	+10.275%	+10.189%	+0.086%
2 Year	+15.864%	+15.855%	+0.009%

Portfolio return as calculated by State Street Bank Analytics.

The performance results are within the policy limits of +/- twelve basis points. The full replication method minimizes expected tracking error. The tracking error is attributable primarily to three factors: (I) cash drag from dividend accruals[1], (ii) frictional cash associated with the increased fundings, and (iii) security misweights. Of these three factors, the primary cause of performance tracking error has been cash drag from dividend accruals. Cash drag arises because Standard & Poor's assumes that dividend reinvestment occurs on ex-date for performance calculation. Typically, the Portfolio does not actually receive payment of dividends on the ex-dividend date. The actual receipt of dividends could be two to six weeks after the ex-dividend date. Therefore, the Portfolio will not be able to buy S&P stocks during the lag time for the yet-to-be received dividend amounts. To reduce tracking error, dividends on the constituent stocks are collected and reinvested promptly. The Portfolio trades stocks when the index constituents change and when dividends are reinvested.

Cash Equitization Program - The objective for the Cash Equitization Program (Program) is to closely match the performance of the S&P 500 Index. Table 2 shows the Program's performance for the three month period ending March 31, 2000. The information compares the Program's performance with the returns of the Index. The Program's return for the past 3 months was 2.393% while the index return was 0.099% lower at 2.294%. The outperformance occurred because the interest earned on the short-term instruments exceeded the financing cost implicit in the futures contracts. These returns incorporate transaction costs.

Table 2: Cash Equitization Program Performance

Total Return	Program	S&P 500 Index	Tracking Error
12/31/99 – 3/31/00	2.393%	2.294%	0.099%

1 In a market environment when equity returns exceed returns on short-term cash instruments, the Portfolio would under-perform the benchmark.

The Program enables CalSTRS to maintain the cash positions while providing domestic equity market exposure. Table 3 below shows that hedging cash balances added approximately $9.9 million to the CalSTRS investment portfolio.

Table 3: Summary of Cash Equitization Program As of March 31, 2000

$ Value of Equitized Cash Balance as of March 31, 2000 $147.2 million

For the Eleven Months Ending March 31, 2000:	
$’s Gained Through Investing Cash In Equity Futures	$16.6 million
Less: $’s Gained if Invested in Cash	$6.7 million
Equals: Gross $’s Gained due to Equitization	$9.9 million

Venture Capital Stock Distribution Program - As previously mentioned, the objective of the Venture Capital Stock Distribution Program (Program) is to return cash of a value equal to or greater than the market value of the distributed stock at time of distribution. Table 4 summaries the activity for the Program. For the 12 month period ending April 30, 2000, the Program liquidated 10.1 million shares and realized $75.9 million above the total distribution value.

Table 4: Summary of Venture Capital Stock Distribution Activity

Month	Distributed Shares	Distribution Value	Gross Proceeds	Difference
May-99	100,000	7,612,500	8,103,025	490,525
Jun-99	438,500	20,158,640	24,512,208	4,353,568
Jul-99	548,438	20,163,310	22,090,325	1,927,015
Aug-99	663,127	24,226,739	24,600,809	374,071
Sep-99	402,185	13,358,050	14,653,110	1,295,060
Oct-99	522,769	23,240,320	27,397,023	4,156,703
Nov-99	876,049	53,751,795	59,361,945	5,610,149
Dec-99	950,253	60,452,525	68,830,447	8,377,922
Jan-00	3,686,332	175,907,452	194,526,022	18,618,571
Feb-00	999,417	51,400,547	79,523,797	28,123,250
Mar-00	955,375	83,303,147	85,897,755	2,594,607
Apr-00	656,829	48,152,745	35,600,931	(12,551,814)
Total:	**10,142,445**	**$533,575,023**	**$609,496,466**	**$75,921,442**

Key Issue

A threshold issue of Internal Equities is whether to expand its role by bringing in a portion of the MSCI EAFE indexed portfolio under internal management. There are several benefits for managing a MSCI EAFE indexed portfolio internally. They are as follows:

1. Potential to reduce overall tracking error within the MSCI EAFE passive component
2. Cost savings if sufficient asset size is internalized
3. Gain in knowledge base
4. Build up of infrastructure for additional index fund management
5. More control over liquidations and asset allocations

The Investment Committee authorized staff to issue a Request for Proposal (RFP) for passive domestic and non-domestic equity management. The RFP for passive managers is an important development for the passive MSCI EAFE component. The results of the RFP process will provide a benchmark to help the Investment Committee when assessing the potential value of internal management of a portion of the passive MSCI EAFE component. A detailed review and analysis will be completed and presented to the Investment Committee during the next fiscal year.

California State Teachers' Retirement System
Long-Term Fixed Income

Business Plan 2000/01

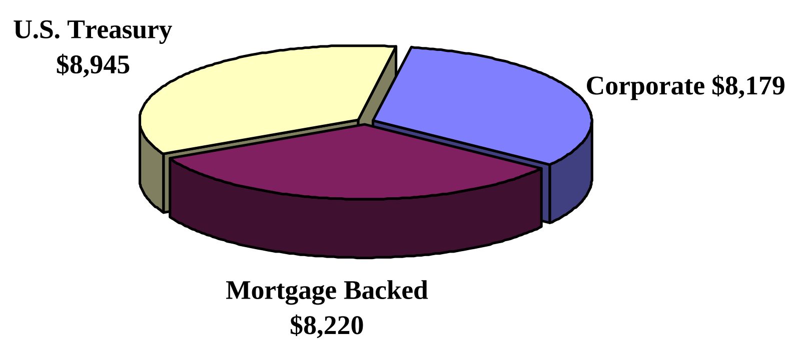
Role and Purpose

Long-term fixed income securities can be considered unique in that they represent an investment asset class that bridges the return and risk characteristics between cash equivalents and stocks. Long-term fixed income investments provide diversification and liquidity/cash flow to the investment portfolio.

Portfolio Characteristics

The market value of the core domestic long-term Fixed Income Portfolio was $25.3 billion on March 31, 2000, representing 22.3% of the total investment portfolio. The Fixed Income Portfolio is representative of a broad market fund, and is comprised of U.S. Treasury/Agency, mortgaged-backed, and investment grade corporate securities. The following pie chart shows these three segments of the domestic Fixed Income Portfolio as of March 31, 2000. The assets shown on the pie chart do not include the Whole Loan Portfolio.

California State Teachers' Retirement System
Fixed Income Allocation
As of 3/31/00



CalSTRS follows an enhanced indexing strategy within the core domestic Fixed Income Portfolio. This strategy involves an objective of outperforming the performance benchmark while monitoring the major risk characteristics. The major risks associated with holding fixed income assets can be linked to both interest rate risk and credit risk. Interest rate risk is the price volatility produced by changes in the overall level of interest rates in the marketplace, as measured by effective duration. Credit risk is the uncertainty surrounding the issuer's ability to repay its obligations. One of the primary methods of identifying credit risk in a fixed income portfolio is through the use of the ratings established by the credit rating agencies (Moody's and Standard & Poor's).

The following table represents a snapshot of CalSTRS' core domestic Fixed Income Portfolio, as compared to the LPF Index (CalSTRS' domestic long-term fixed income performance benchmark) on March 31, 2000, in terms of their major risk characteristics.

	CalSTRS PORTFOLIO		**LPF INDEX**	
	% of Portfolio	Effective Duration	% of Index	Effective Duration
US Govt/Agency	**36.02%**	**9.25**	**40%**	**9.16**
S&P Rated				
AAA	0.08%	7.11	1.40%	7.52
AA+	0.03%	6.67	0.43%	6.83
AA	0.92%	9.12	1.06%	8.64
AA-	3.21%	8.26	2.90%	8.00
A+	4.87%	8.58	4.62%	8.18
A	6.16%	7.45	4.93%	7.86
A-	3.94%	8.31	3.35%	8.03
BBB+	4.29%	7.80	3.57%	7.81
BBB	4.39%	8.10	3.75%	7.43
BBB- & below	4.91%	8.00	3.91%	7.56
S&P Rated	**32.80%**	**8.03**	**30%**	**7.93**
MBS	**31.18%**	**4.26**	**30%**	**4.35**
TOTAL	**100%**	**7.23**	**100%**	**7.28**

Nearly 70% of the domestic long-term fixed income holdings are either U.S. Treasury, U.S. Agency or U.S. government guaranteed securities, with a minimal percentage held in the lowest credit categories.

Performance Measurement

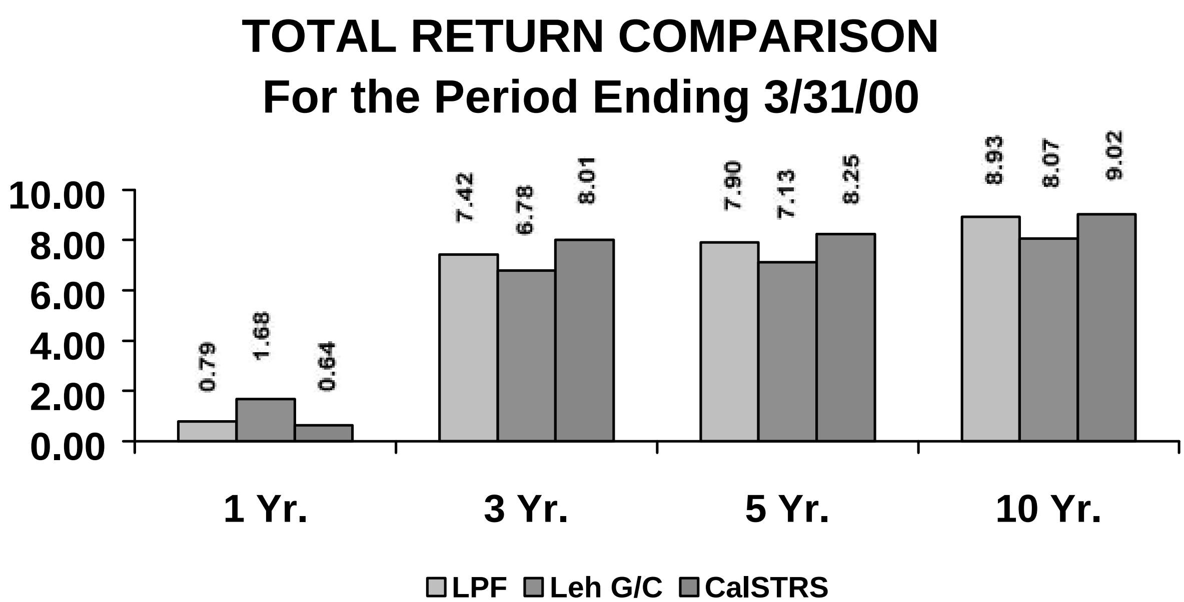
CalSTRS' performance benchmark for the domestic long-term fixed income assets is the Salomon Brothers' Large Pension Fund Index (LPF Index). The LPF Index was originally introduced in 1986 by Salomon Brothers, and was designed primarily for pension funds seeking to establish domestic long-term core fixed income portfolios that more closely matched the longer duration[1] of their nominal dollar liabilities.

The LPF Index utilizes fixed sector weightings of 40% U.S. Treasuries/Government Sponsored, 30% Corporates, and 30% Mortgages. This departure from the market capitalization weights of 43% U.S. Treasuries, 24% Corporates, and 33% Mortgages[2], combined with the minimum maturity of seven years for all Treasury/Government

[1] Duration is a measure of price sensitivity to interest rates. Duration is the percentage move in price that is anticipated, given a 100 basis point (1 percent) move in interest rates.
[2] Salomon Brothers BIG Index, March 2000

Sponsored and corporate securities, provides a less liquid, longer duration benchmark with a higher yield.

For comparison purposes, included in the following chart is a snapshot of the return history for the Salomon Brothers LPF Index (LPF) and the Lehman Brothers Govt./Corp. Index (Leh.G/C). The Lehman Govt./Corp. Index is considered to be an industry standard among the thousands of investment grade fixed income benchmarks. The time periods selected are the past one, three, five and ten-year returns for the period ending March 31, 2000. Also included for comparison purposes, is the return for the CalSTRS Fixed Income Portfolio over the same time periods.



With the exception of the past twelve months, the LPF Index has provided a higher total return than the Lehman Govt./Corp. Index. Over the past three, five and ten year time periods, the LPF index has outperformed the Lehman Govt./Corp. Index by 65 to 85 basis points. To put this into perspective, given that CalSTRS' Fixed Income Portfolio has averaged $23 billion over the past ten years, the net benefit of using the LPF Index as the performance benchmark has added almost $200 million annually.

Key Issues

The CalSTRS' long-term Fixed Income Portfolio is the integration of the evolution of the fixed income markets into the portfolio. Given the diversification and liquidity roles that they play, fixed-income assets have been viewed by institutional investors as a critical component of their portfolios for several decades. As investors' interests have evolved, so have the fixed income markets.

In the mid-and-late-1980's, publicly traded fixed income opportunities had four major groupings: government bonds (or U.S. Treasuries), mortgage-backed securities, corporate bonds, and municipal bonds. Today, many of the minor bond segments of ten-to-fifteen years ago are now playing a much larger role. All of the proportions of the four major segments have declined, giving ground to the newer, more innovative segments. For example, asset-back instruments ("ABS") have grown from virtually no representation 10 years ago to over 8% of the total bond market today. Such is the case with other bond categories, such as bank loans and "other" loans.

This extension of the bond market makes establishing bond policy, portfolio management, and monitoring all the more critical. Given the fundamental roles of fixed-income instruments within a multi-asset class portfolio, the consideration of exposure to these newer instruments becomes an important factor, as CalSTRS continues to evaluate its overall approach to fixed-income investment.

As a result, one of the 1999/00 goals and objectives established for the Investment Branch was to explore, evaluate, and present a report on the inclusion of High Yield Bonds in CalSTRS' Fixed Income Portfolio. Staff and Pension Consulting Alliance (PCA) made a presentation to the Investment Committee, that included an historic overview of High Yield Bonds, along with the role they play in the fixed income markets. The research demonstrated that there is the potential for High Yield Bonds to add value to the CalSTRS domestic Fixed Income Portfolio, in the form of an improved risk-return profile.

California State Teachers' Retirement System
Real Estate

Business Plan 2000/01

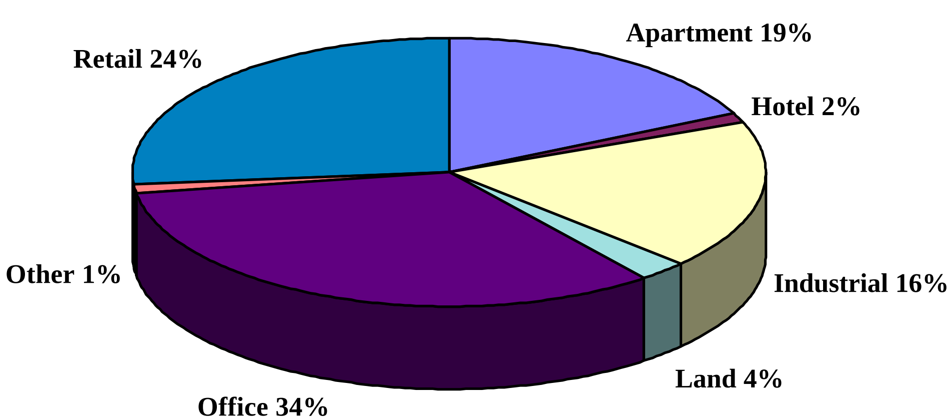
Role and Purpose

The primary role of real estate is to improve diversification of the overall investment portfolio. The real estate portfolio will have an objective to achieve a rate of return that corresponds to the amount of risk outlined in the real estate portfolio risk/return composite approved by the Investment Committee and to provide a stable cash flow to the overall investment portfolio. The portfolio will incorporate a combination of low-, moderate-, and high-risk real estate investment strategies to implement the approved plan.

Portfolio Characteristics

The market value of the CalSTRS real estate portfolio as of December 31, 1999 was $3.1 billion, which represents 2.5% of the total investment portfolio. The real estate portfolio is currently divided into three different investment structures: (1) direct ownership, (2) commingled funds (opportunity funds), and (3) joint ventures. Direct ownership properties, which make up 84% of the real estate portfolio, consisting of office, industrial, retail, and apartment. Commingled funds comprise 15% of the real estate portfolio and consist of limited partnerships investing in a wide range of property types that vary from land development to loan portfolios. Joint venture holdings total 1% of the portfolio invested in industrial and office properties. The following chart identifies the various property types within the CalSTRS total real estate portfolio as of December 31, 1999.

Property Type Diversification
As of December 31, 1998



Approximately 68% of the CalSTRS real estate portfolio are invested in office and industrial property types, which corresponds to the general pension real estate market (as identified by the NCREIF Property Index). The overall U.S. real estate marketplace has about 66% of those property types are in office and industrial. The geographic diversification of the

CalSTRS real estate portfolio remains close to the strategic targets and within the approved range. The following chart identifies the geographic regions for the CalSTRS properties as of December 31, 1999.

	Percent as of 12/31/99	Target Percent	Range
East Region	28.0%	20%	10% to 30%
Midwest Region	9.9%	15%	5% to 25%
South Region	18.5%	25%	15% to 35%
West Region	43.6%	40%	30% to 50%

An internal pipeline report designed to monitor pending real estate activity shows a substantial amount of product registered in the office and apartment property types located in the East region.

External Advisors and Commingled Funds - All the direct ownership real estate assets are managed by external advisors acting as fiduciaries. These advisors purchase, manage, and sell properties. The following table identifies CalSTRS' current real estate advisors and the December 31, 1999 market value of the portfolios under management.

CB Richard Ellis	$ 1,175 million
Clarion Partners	88 million
Heitman Capital	28 million
Lend Lease	935 million
MIG Realty	187 million
Sentinel Realty	17 million
SSR Realty Advisors	216 million
Total Direct Ownership Portfolio	$2,649 million

In the commingled fund investment structure CalSTRS is one of several limited partners within a limited partnership. These funds have a broad mandate and can invest in real estate related assets. A portion of each partnership can be invested outside the United States. CalSTRS' opportunistic funds and their current market values as of December 31, 1999 are shown below:

Colony Fund II	$ 80 million
Morgan Stanley Fund II	200 million
Lazard Freres Strategic Investors	209 million
Total Commingled Funds	$489 million

Performance and Benchmark - The current performance benchmark for CalSTRS' real estate portfolio is the NCREIF Property Index. The following table compares the returns of CalSTRS' real estate portfolio with the NCREIF Property Index over the past one, three and five year periods.

CalSTRS' real estate compared to NCREIF Index For the period ended December 31, 1999			
	One Year	**Three Years**	**Five Years**
CalSTRS Real Estate	12.6%	17.4%	15.0%
NCREIF Index	11.6%	13.1%	11.3%

It is important to recognize that all returns are reported gross of fees for both the CalSTRS real estate portfolio and NCREIF Index. The CalSTRS' real estate returns are lagged by one quarter for direct ownership properties and two quarters for the commingled funds.

Key Issues

Investment Structure - Investment structure for the CalSTRS real estate portfolio consists of direct ownership, commingled funds, and joint ventures. The primary investment structure for owning low-risk and moderate-risk real estate has been direct ownership. The high-risk allocation has been accessed primarily through commingled funds.

To provide additional diversification of the investment structure, a report on joint venture investing should be completed. Joint venture investing has a variety of possible implementation options. The advantages of joint venture investing compared to commingled funds are more control of the fee structure, exit strategy, and geographical diversification. The advantages of joint venture investing compared to direct ownership are access to certain investment categories, higher expected returns, and risk sharing with strategic partners.

Depending on the construction methodology, joint venture investing could be utilized on low-risk, moderate-risk and high-risk properties.

Diversification Targets - The following is a comparison of the current strategic property type diversification targets and the NCREIF property types. The U.S. real estate markets are dynamic in nature and consequently will change over time.

	Approved Target	12/31/99 Actual	12/31/99 NCREIF
Apartment	20%	17%	17%
Industrial	25%	24%	16%
Office	35%	46%	42%
Retail	20%	14%	24%
Other	0%	0%	1%

CalSTRS has a strategy that the low-risk real estate portfolio diversification targets should be a reflection of the current marketplace. The property type diversification targets should be modified to more closely represent the actual marketplace.

Retail Exposure - The retail property type has a bimodal distribution. One segment is larger regional malls and the other segment is smaller local properties. The regional mall segment is difficult to access through direct acquisition and ownership. The more effective investment structure is through joint venture or public securities (REITs).

Two strategic options should be reviewed. The first is to reduce the strategic target for the retail property type to reflect the inability to effectively access regional malls. The second is to develop a joint venture or public security strategy to acquire and own regional malls.

Legal Title - For the direct real estate investments, CalSTRS holds title to the real estate properties directly. When there is a legal issue with an asset CalSTRS as owner and landlord may be named as a party to the action. Anytime legal action is taken there is the potential for legal, political, and economic consequences.

One alternative to reduce the legal risks is by modifying the method of holding title to the real estate property. There are ways to remove CalSTRS from the chain of title which may serve to reduce or limit the liability to the value of the actual real estate property.

California State Teachers' Retirement System
Securities Lending Program

Business Plan 2000/01

Role and Purpose

Securities Lending is an agreement between a lender and a borrower to transfer ownership of a security temporarily in order to earn additional income. The lender retains ownership rights of the security and is entitled to any distributions that occur with respect to that security during the life of the loan, such as coupon and dividend payments. The borrower backs the agreement by delivering collateral to the lender, either in the form of cash, which is currently the dominant form of collateral in securities lending transactions, or other liquid securities, in an amount that exceeds the market value of the securities borrowed. At the end of the loan or on a periodic basis, the lender is compensated.

Description and Definition

CalSTRS has developed a Securities Lending Program designed to enable the System to use its existing asset base and investment expertise to generate additional income. The income generated from any particular loan is dependent upon two factors: 1) the negotiated lending terms agreed to at the outset of the loan (i.e. the rebate rate) and, 2) the return generated from the management of the cash taken as collateral for the loan.

The rebate rate represents payment to the borrower for the use of the collateral, and is normally received in the form of cash. The level of the rebate rate is the direct result of a number of factors, including: 1) desirability of the issue, 2) length of the lending agreement and, 3) level of prevailing interest rates. There is a definitive securities lending market, within which each of these factors is continuously being considered, evaluated and priced.

The return attributable to the management of the cash collateral constitutes approximately half of the income generated by securities lending transactions, while representing primarily all of the risk. That is because the return on the investments made with the cash collateral must exceed the rebate rate paid to the borrower (for the use of that cash) in order to be profitable. In other words, if the cash collateral does not provide a return exceeding the rebate rate or if the investment incurs a loss in principal, part of the payment to the borrower must come from the lender's resources. (It should be noted that CalSTRS mitigates this risk by maintaining a considerable amount of control over the investments allowed within its cash collateral portfolios.)

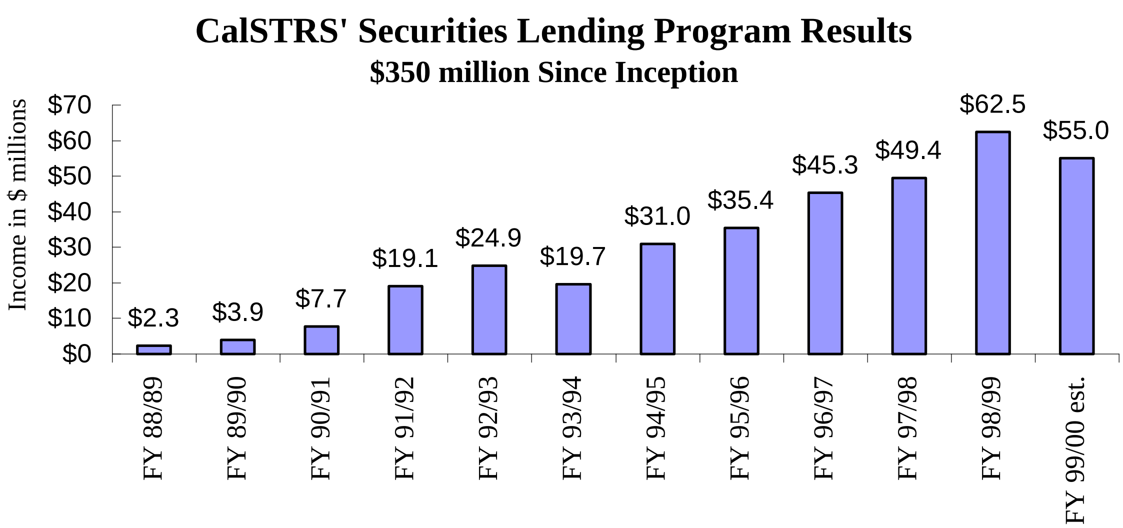
It should be noted that the credit-worthiness of each borrower is evaluated prior to executing a Securities Lending Agreement, and the credit lines of each borrower are reviewed on a regular basis.

Program Characteristics

Of the more than $110 billion in assets that CalSTRS had under management as of March 31, 2000, approximately 75%, or $85 billion, could be considered to be potentially lendable. Furthermore, of this $85 billion of potentially lendable assets, the CalSTRS Securities Lending Program maintains on-loan balances of approximately twenty percent (20%), on average. There was $16 billion of assets on loan within the CalSTRS Securities Lending Program, as of March 31, 2000.

Performance Measurement

Although there is no generally accepted performance measurement standard by which to judge the Securities Lending Program, a process has been established in order to identify and monitor the financial contribution of the program. The chart below shows the historical levels of income received as a result of the overall Securities Lending Program. The income amounts in the graph are listed in millions of dollars.



As the chart illustrates, by June 30, 2000, the Securities Lending Program is expected to have generated over $350 million in incremental income to the fund since its inception twelve years ago. Put another way, over the past five years the Securities Lending Program has added between 5 and 6 basis points to the <u>entire investment portfolio</u> each year, on average.

Key Issue

Currently, most of the Securities Lending Program (80%) is managed on an Agent basis, with the contractor being responsible for both negotiating the lending terms and managing the cash collateral. The remaining portion (20%) is split evenly between a combination of the Agent negotiating the lending terms, with CalSTRS managing the cash collateral, and CalSTRS both negotiating the lending terms and managing the cash collateral. CalSTRS has a large lendable asset base, with competition and diversification benefits achieved through the use of multiple lenders. The eventual structure for CalSTRS should result in an appropriate balance, based upon a risk/reward analysis.

California State Teachers' Retirement System
Short-Term Fixed Income

Business Plan 2000/01

Role and Purpose

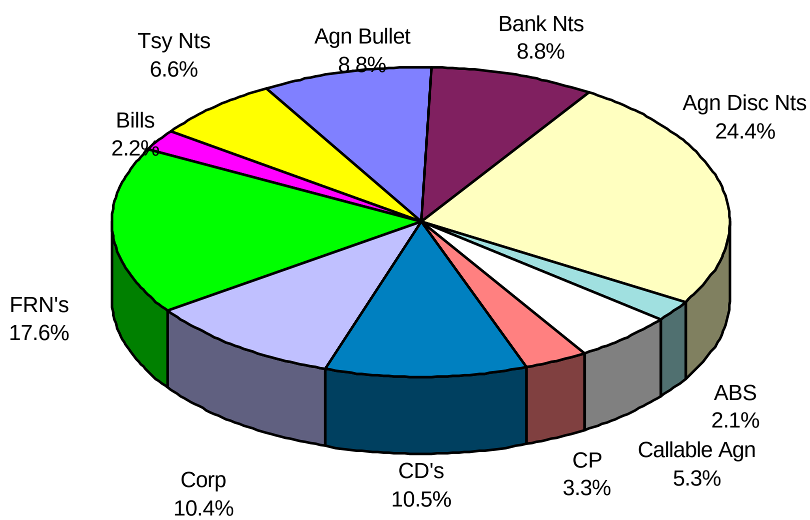
CalSTRS' domestic Short-Term Fixed Income Portfolio provides cash flow for the funding of benefit payments, investment manager activity, and asset allocation purposes. At a policy weighting of 1% of total assets, the investment objectives for the Short-Term Fixed Income Portfolio are threefold: 1) to seek the preservation of capital (safety), 2) to provide liquidity and, 3) to maximize current income.

The "preservation of capital" objective is accomplished by investing in a diversified portfolio of high quality, short-term, money-market securities including, but not limited to, commercial paper, bankers' acceptances, repurchase agreements, corporate bonds, and U.S. Treasuries/Agencies. Spreading the funds across different investment types, multiple issuers, and various maturities, minimizes the impact that any one industry or investment type can have on the portfolio.

Portfolio Characteristics

The market value of the Short-Term Fixed Income Portfolio was $1.1 billion on March 31, 2000, representing 0.9% of the total investment portfolio. The Short-Term Fixed Income Portfolio is a diversified portfolio comprised of domestic short-term money market securities, including commercial paper, bankers' acceptances, repurchase agreements, asset-backed securities (ABS), and U.S. Treasuries/Agencies. The following pie chart shows the sector breakdown of the Short-Term Fixed Income Portfolio, as of March 31, 2000.

CalSTRS' Short-Term Fixed Income Portfolio
Sector Breakdown as of 03/31/2000



As described earlier, the System's strategies for managing the Short-Term Fixed Income Portfolio include varying the composition of the portfolio's investments and the average maturity of the portfolio, based upon an assessment of the relative values of the various money market instruments and future interest rate patterns. Given the primary objectives of safety, liquidity, and yield, specific portfolio guidelines with respect to diversification, credit limits and maturity are followed and monitored on an ongoing basis.

The following tables represent a snapshot of CalSTRS' Short-Term Fixed Income Portfolio as of March 31, 2000, in terms of portfolio quality and maturity:

Portfolio Quality	% of Portfolio
Gov/Agy	45.2%
AAA (A1/P1)	21.3%
AA	0.0%
AA-	1.8%
A+	8.9%
A	13.4%
A-	1.8%
BBB+	0.9%
BBB (A2/P2)	6.8%
NR	0.0%
	100.0%

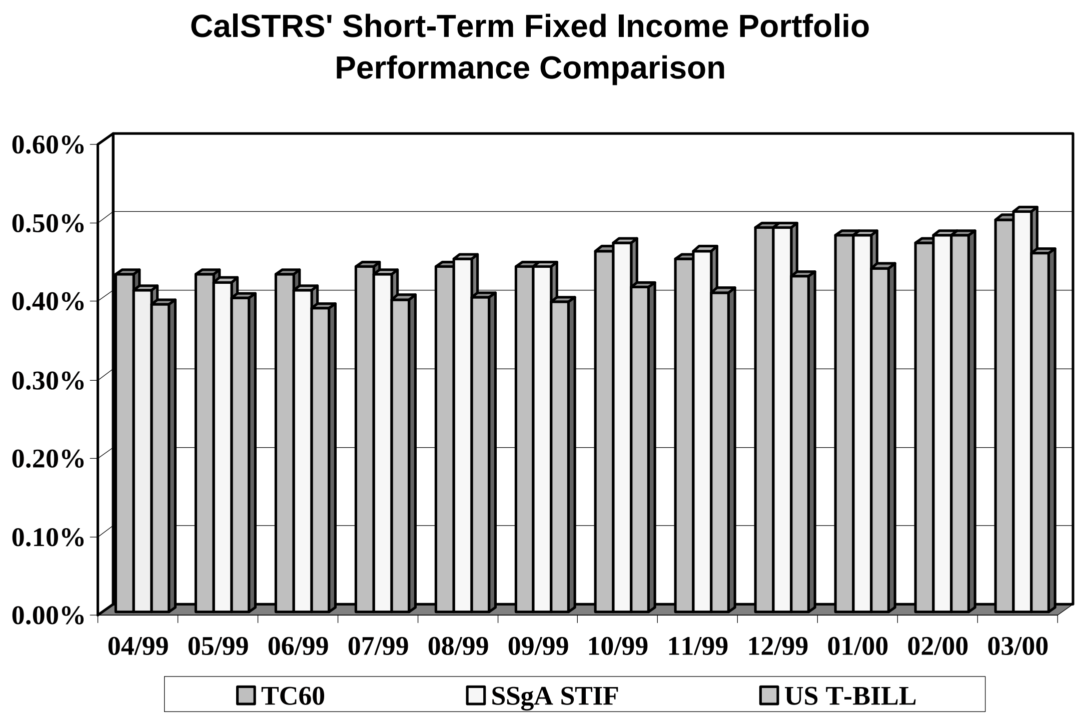
Maturity Spectrum	% of Portfolio
2000	67.2%
2001	14.0%
2002	17.5%
2003	1.3%
	100.0%

More than two-thirds of the short-term investments consist of U.S. Treasury, U.S. Agency, or securities of the highest credit quality. The average number of days to maturity of the portfolio as of March 31, 2000, was 146 days.

Performance Measurement

The primary purpose of performance measurement is to monitor how well a portfolio is doing compared to the objectives that were established for it. As described earlier, the investment objectives of CalSTRS' Short-Term Fixed Income Portfolio are to seek the preservation of capital and liquidity, and to generate the highest possible current income consistent with a prudent level of risk available from investing in a diversified portfolio of domestic short-term fixed income securities. The performance of portfolios consisting of excess reserves, such as CalSTRS' Short-Term Fixed Income Portfolio, can be difficult to evaluate, given the different mandates, risk constraints, and liquidity needs typical of these types of portfolios. Therefore, it is difficult to select an appropriate benchmark against which to measure the performance of a portfolio that consists of excess reserves used primarily for liquidity purposes.

To give perspective of the return generated by CalSTRS' Short-Term Fixed Income Portfolio, a peer group comparison can be made with other large money-market funds with a similar investment mandates and guidelines. The following is a chart comparing CalSTRS' Short-Term Fixed Income Portfolio performance with that of the State Street Global Advisors Short-Term Investment Fund (SSgA STIF) and an index comprised of equally weighted one-year U.S. Treasury Bills.



Over the past 12 months, the return for CalSTRS' Short-Term Fixed Income Portfolio has consistently exceeded the risk-free index of one-year U.S. Treasury Bills, and has produced a similar yield to that of the SSgA STIF.

Key Issue

The major issue facing CalSTRS' Short-Term Fixed Income Portfolio management is how to continue to integrate the evolution of the fixed income markets into the portfolio. In addition, the Short-Term Fixed Income Portfolio must consider this issue while continuing to balance the multiple investment objectives of providing safety and liquidity, while achieving the highest return possible that is consistent with a prudent level of risk.
The evolution of the bond market, along with the fundamental role and objective of the Short-Term Fixed Income Portfolio, makes the consideration of exposure to these newer instruments important, as CalSTRS continues to consider its overall approach to fixed-income investment.

California State Teachers' Retirement System
Soft Dollar Program

Business Plan 2000/01

Role and Purpose

The Investment Branch of the California State Teachers' Retirement System (CalSTRS) established a Soft Dollar Program (Program) for the purpose of using a portion of the commissions, generated by its managers, to defray expenses which otherwise would have been incurred and paid for using budgeted funds. The term soft dollar refers to the process and the use of these commissions to pay for investment related goods and/or services from vendors by either the investment manager/advisor or the plan sponsor. In all soft dollar arrangements, the investment manager/advisor must always act for the exclusive benefit of its clients and place the clients' interest first.

Performance Measurement

There is not a generally accepted performance measurement standard to judge the success of the Soft Dollar Program. However some measures to consider would include; 1) improvement in conversion ratios, 2) expansion of participants, both managers and brokers, 3) ability to pay for services as approved, and 4) performing reconciliations among all parties.

Key Issues

A key issue for the Soft Dollar Program would be the continuation of the program to include new managers and appropriate brokers where feasible. Implementation of monitoring procedures will assure that all external managers are in compliance with the Securities and Exchange Commission's guidelines with regard to their use of soft dollars. Additionally, the brokers' financial stability should be continually monitored.

California State Teachers' Retirement System
Investment Operations

Business Plan 2000/01

Role and Purpose

The primary role of the Investment Operations Unit is to provide support and services for all CalSTRS investment activities. In addition to facilitating the timely purchase, sale, cash forecasting and accounting for all domestic and international fixed income and equity securities, this Unit must provide support for non security activities such as securities lending, home loan program, credit enhancement, cash equitization, and technology projects and back office systems used to manage CalSTRS' investments.

Characteristics

As of June 30, 2000, the CalSTRS portfolio will hold approximately $115 billion of public and private equity and fixed income securities. These investments will span countries throughout the world and include a diverse array of companies. The Investment Operations Unit manages the "back office" activity for all investments in the portfolio including the coordination of internal and external managers, providing investment related reporting as necessary and technological support for all investment related systems and software.

Performance Measurement

There is not a generally accepted performance measurement standard to judge the success of the Operations Unit. Some measures to be considered could include 1) timely settlement of all transactions, 2) facilitation of accurate securities and money wire transfers, 3) dissemination of accurate information to internal and external auditors, 4) preparation of accurate information for the Investment Committee, 5) preparation of accurate information to the internal and external investment managers, 6) participation in the implementation of new programs, and 7) facilitation of all investment technological needs.

Key Issues

Key issues for the Investment Operations Unit include the increase in external managers and added responsibilities due to the implementation or expansion to non security programs such as the Home Loan Program, Securities Lending, Credit Enhancement, and Cash Equitization.

Other key issues revolve around technology and how it is utilized in the investment arena. The world of technology is ever changing and the challenge is to attempt to keep pace. The Operations Unit is charged with the responsibility to assure that the Investment Branch is equipped to manage CalSTRS' multi-billion dollar portfolio.

The final issue is the preparation of business continuity plans for investment related activities as well as with business partners (such as State Street Bank) and general operations.

I. Implementation Objectives

1. Participate in the planning and implementation process as approved for new or modified investment programs to minimize the disruptions to existing functions, products, and programs.

2. Utilize technology to enhance or improve the investment process such as Bloomberg direct link or PORTIA software.

3. Evaluate enhancements to the real estate cash management program concentrating on the changes caused by the increase in geographic diversification and number of properties serviced.

4. Review and recommend changes to the current repatriation requirement.

II. Staffing Issues

Additional staffing would be required if new programs are added, if activities in current programs are increased, and technology needs continue to evolve. No other staffing issues are anticipated.